

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A vehicle navigation system, ~~displacement sensor~~ comprising:
a wireless transmitter including a power source generating a wireless signal indicative of a vehicle displacement that periodically transmits said signal; ~~and~~
a wireless receiver receiving said wireless signal from said transmitter; and
a processor associated with said receiver for calculating the vehicle position based upon signals from a position determining device and said wireless signals indicative of said vehicle displacement.
2. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 1 wherein said transmitter is mounted on a rotating component of a vehicle.
3. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 2 wherein said transmitter is mounted on a wheel.
4. (Cancelled).
5. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 1 wherein said power source generates power based upon motion.
6. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 2 wherein said transmitter generates an acoustic signal.

7. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 2 wherein said transmitter generates an RF signal.

8. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 2 wherein said transmitter generates a fixed number of beacon signals upon each revolution of the vehicle part.

9. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 8 wherein said fixed number is one.

10. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 1 wherein said transmitter generates modulated RF signal indicative of vehicle displacement.

11. (Currently Amended) A vehicle navigation system, ~~displacement sensor~~ comprising:

means for generating a wireless signal indicative of rotational displacement of a vehicle part which periodically transmits said wireless signal; ~~and~~

a wireless receiver receiving said wireless signal; ~~and~~

means for determining displacement of a vehicle based upon said wireless signal; ~~and~~

means for calculating the vehicle position based upon signals from a position determining device and said wireless signals indicative of said vehicle displacement.

12. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 wherein said means for generating is mounted on a wheel.

13. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 12 wherein said means for generating includes a power source generating power based upon rotation.

14. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 wherein said wireless signal is an acoustic signal.

15. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 wherein said wireless signal is an RF signal.

16. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 wherein said means for generating generates a fixed number of beacon signals upon each revolution of the vehicle part.

17. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 wherein said fixed number is one.

18. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 wherein said means for generating generates a modulated RF signal indicative of vehicle displacement.

19. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 further including a mass movable relative to said vehicle part based upon motion, said wireless signal generated based upon motion of said mass.

20. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 19 wherein said mass is mounted to a piezo-electric device.

21. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 further including means for calibrating said wireless signal to vehicle displacement while the vehicle is moving.

22. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 11 further including means for dead-reckoning a position of a vehicle based upon said wireless signal.

23. (Currently Amended) A vehicle navigation system comprising:

means for generating a wireless signal including a power source indicative of rotational displacement of a vehicle part which periodically transmits said wireless signal;
a receiver receiving said wireless signal; and
~~means for propagating a position of the vehicle based upon said wireless signal~~
means for calculating the vehicle position based upon signals from a position determining device and said wireless signals indicative of said vehicle displacement.

24. (Currently Amended) The vehicle navigation system of claim 23 further including means for calibrating said wireless signal to vehicle displacement while the vehicle is moving.

25. (Currently Amended) The vehicle navigation system of claim 23 further including a database of roads, said position of said vehicle propagated relative to said database of roads.

26. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 23 further including means for dead-reckoning a position of a vehicle based upon said wireless signal.

27. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 23 wherein said means for generating a wireless signal counts rotations of a vehicle wheel.

28. (Currently Amended) The vehicle navigation system ~~displacement sensor~~ of claim 27 further including means for calibrating rotations of said vehicle wheel to displacement of the vehicle.

29. (Currently Amended) A method for determining vehicle displacement including the steps of:

generating a wireless signal indicative of rotational displacement of a vehicle part which periodically transmits said wireless signal;
receiving said wireless signal; ~~and~~
determining displacement of a vehicle based upon said wireless signal; and
means for calculating the vehicle position based upon signals from a position determining

device and said wireless signals indicative of said vehicle displacement.

30. (Previously Presented) The method of determining vehicle displacement of claim 29 further including the step of calibrating the wireless signal to vehicle displacement.

31. (Previously Presented) The method of claim 30 further including the step of dead-reckoning a position of a vehicle based upon the wireless signal.

32. (Original) The method of claim 31 wherein the dead-reckoning the position of the vehicle is based upon the calibrated wireless signal.

33. (New) The vehicle navigation system of claim 1, wherein said position determining device is a GPS.

34. (New) The vehicle navigation system of claim 1, wherein said position determining device is a dead reckoning device.